



Freewill™ Barrier Free Bath Whirlpools:
K-12105-H* K-12106-H*

INSTALLATION INSTRUCTIONS




IMPORTANT SAFETY INSTRUCTIONS

ATTENTION INSTALLER: INSTRUCTIONS PERTAINING TO RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS


**READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS**

 **WARNING:** When using this unit, always follow basic precautions, including the following:

 **WARNING: RISK OF ELECTRICAL SHOCK.**
The unit must be connected only to a circuit that is protected by a **Ground-Fault Circuit-Interrupter (GFCI)**. Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, press the test button. The GFCI should interrupt power. Press the reset button. Power should be restored. If the GFCI fails to operate in this manner, there is a ground current flowing or the GFCI is defective. **The possibility of an electric shock may exist. DO NOT use this unit.** Disconnect the unit and have the problem corrected by a qualified licensed electrician.

Grounding is required. The unit should be installed and grounded by a qualified service representative.

A pressure wire connector is provided on the pump to permit connection of a solid copper bonding conductor between this unit and all other electrical equipment and exposed metal in the vicinity, as needed to comply with local requirements.

 **DANGER: RISK OF INJURY.**

Hot whirlpool baths can put certain stresses on the body, as do any hot bath, shower, sauna, or steam bath. **Prolonged immersions in hot water may induce hyperthermia.** Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of hyperthermia include an increase in the internal body temperature, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include: (1) failure to perceive heat, (2) failure to recognize the need to exit the bath, (3) unawareness of impending hazard, (4) fetal damage in pregnant women, (5) physical inability to exit the bath, and (6) unconsciousness resulting in the danger of drowning. **Warning:** The use of alcohol, drugs, or other medication can greatly increase the risk of fatal hyperthermia.

DO NOT operate this unit without the guard on the suction fitting.

Never drop or insert any object into any opening.

Use this unit only for its intended use as denoted in this manual. DO NOT use attachments not recommended by the Kohler Co.

Install to permit access for servicing.


 **DANGER: RISK OF INJURY.** To reduce the risk of injury, do not permit children to use this unit unless they are closely supervised at all times.

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INTRODUCTION

Please read these instructions carefully to familiarize yourself with the required tools, materials, and installation sequences. Follow the sections that pertain to your particular installation. This will help you avoid costly mistakes. In addition to proper installation, read all operating and safety instructions.

The variety of installations possible with this bath may require framing procedures other than those described in this manual.

All information in this manual is based upon the latest product information available at the time of publication. Kohler Co. reserves the right to make changes in product characteristics, packaging, or availability at any time without notice.

Identify and record the model and serial numbers below (found at the pump end of the bath):

Model No. _____ Serial No. _____ Date of Manufacture _____

1. ROUGHING-IN: K-12105-H*, K-12106-H*

A. ORDERING INFORMATION

Applicable product:		
Left outlet	K-12105	shown
Right outlet	K-12106	not shown
Accessories/hardware:		
Drain	K-7161-AF	recommended
Jet trim kit	K-9696	required
MasterShower Handshower	K-9500	recommended*
Paladar valve only trim	K-T14542-4	recommended
Paladar Rite-Temp valve	K-304-K	recommended
Bath spout	K-6855	recommended
Dome light	K-1570	optional
Glassworks bypass door or Forum bypass door	K-9864 K-703012	optional
* Dimensions illustrated		

B. REQUIRED ELECTRICAL SERVICE

Dedicated branch circuit required, protected with Class A Ground-Fault Circuit-Interrupter (GFCI):	
Pump/control	120 V, 20 A, 60 Hz

C. PRODUCT INFORMATION

ADA compliant					
Fixture*:	basin area	top area	weight		
Bathing well	44" x 23"	51" x 26"	265 lbs.		
	water depth	capacity			
To overflow	13"	55 gals.			
Configuration				1-piece	
Drain Outlet				2-1/4" D.	
* Approximate measurements for comparison only.					
Pump	high HP	low HP	V	Hz	A
2-speed	1	1/8	120	60	16.5

D. INSTALLATION NOTES

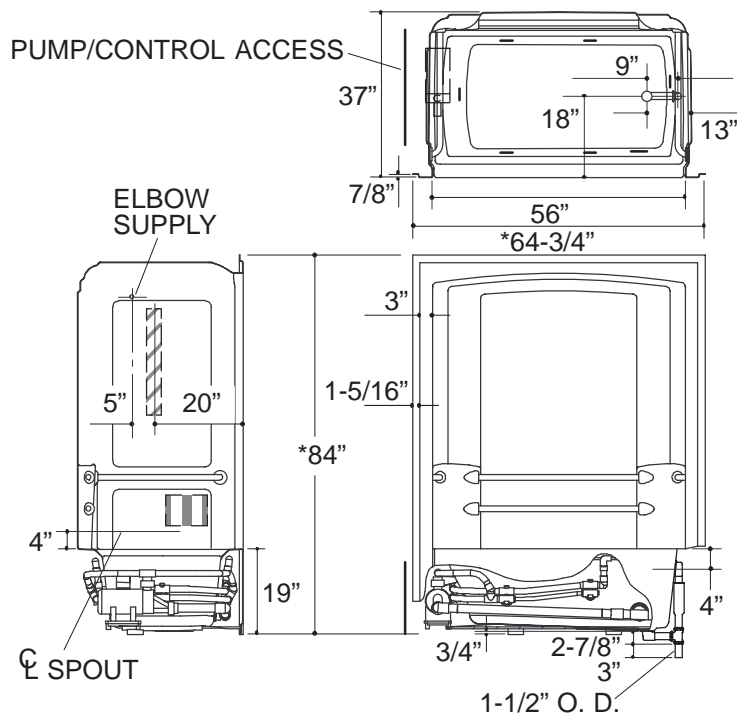
Read the entire installation instruction before beginning the installation.

Unit is not drilled for supply fittings.

Shimming may be required to level fixture.

For optimum accessibility, specify faucets and fittings to install and operate within the control area shown.

Pump is supplied with a grounding-type plug-in cord. Locate the outlet behind the whirlpool, and within 24" of the pump.



ROUGHING-IN NOTES

Fixture conforms to ANSI Standard Z124.2. All dimensions are nominal.

* Recess opening must be 65" x 84-1/4".


No change in measurements if connected with drain illustrated.


Minimum access panel:


Pump/control	20" W x 15" H	required
Stud opening tolerance (+ 1/4" - 0"). When fire rated wall is specified, dimensions are to the inside of the wall board. Some shimming between stud frame and fixture may be required.		
Provide clear floor space per ANSI A117.1, and as shown.		
	Represents control area for faucets.	
	Represents 24" wall mount slide bar.	
	Represents clear floor space for 36" x 60" side entrance.	
	Represents clear floor space for 48" x 60" side entrance.	

2. PRODUCT NOTICES


A. INSTALLER HAZARD NOTIFICATION

 **DANGER: Risk of fire, electric shock, or injury to persons.** Read important safety instructions on inside front cover of these instructions.

 **WARNING: Risk of electrical shock.** A licensed electrician should make all electrical connections.

 **WARNING: Risk of electrical shock.** Connect only to a circuit protected by a Ground-Fault Circuit-Interrupter (GFCI).

 **WARNING: Risk of electrical shock.** Disconnect power before servicing.


 **WARNING: Risk of injury or property damage.** Please read all instructions thoroughly before beginning installation, including the following Product Requirements.

NOTICE: Follow all local plumbing and electrical codes.

B. FACTORY-ASSEMBLED FEATURES

Factory installed components include pump with integral heater, control, and switch. No installation is needed.

The whirlpool pump and piping are factory-assembled.

 **WARNING: Unauthorized modification may cause unsafe operation and poor performance of the whirlpool.** Do not relocate the whirlpool pump, or make other modifications to the whirlpool system, as this could adversely affect the performance and safe operation of the whirlpool. Kohler Co. shall not be liable under its warranty or otherwise for personal injury or damage caused by any such unauthorized modification.

3. PRODUCT REQUIREMENTS

A. SUMMARY OF KEY REQUIREMENTS

- Install unit to a level subfloor.
- Provide properly dimensioned framing.
- Recess installation is recommended.

B. PLUMBING SPECIFICATIONS

Confirm adequate mounting and connection space of the faucet specified for your installation.

Confirm adequate support for the faucet; large faucets that may be inadvertently used as a means of support are not appropriate or safe for this installation.

In locations where plumbing is adjacent to a masonry wall, make provisions for access to the connections. Construct a separate wall a minimum of 6" from the masonry wall. Install furring when the back of the unit is against the masonry wall.

Because this is a one-piece unit, drain and overflow connections cannot be made by reaching over the end of the bath. Before installation, provide access to the connections. See the Plumbing Access Considerations section located on Page 8.

C. PRODUCT INSPECTION

Carefully unpack the whirlpool, remove the protective tape, and inspect the unit for damage. Leave all materials in the carton during construction to prevent damage.

NOTICE: Make sure both union connections to the pump are securely tightened.

D. CONNECTIONS AND SERVICE ACCESS

Before installation, ensure proper access to the final connections.

NOTICE: Provide unrestricted service access to the pump. An access panel must be constructed to allow for sufficient clearance for servicing the pump or controls. The access panel must be located at the pump end of the whirlpool.

E. ELECTRICAL REQUIREMENTS

The installation must have a Class A Ground-Fault Circuit-Interrupter (GFCI). The GFCI protects against line-to-ground shock hazard. Use a 120 V, 20 A, 60 Hz dedicated service for the whirlpool.

4. INSTALLATION REQUIREMENTS

A. TOOLS REQUIRED

- Conventional woodworking tools
- Arc pliers or 14" pipe wrench
- Rule
- Level
- Safety shoes
- Safety glasses
- Square
- Screwdriver
- Pliers
- Utility knife
- Tin snips
- Drill with an assortment of bits and a hole cutting attachment

B. MATERIALS REQUIRED

- Plumbers putty
- Wall coverings, as necessary
- Silicone sealant
- 2x4's
- 2x6's (if additional grab bars are to be installed)
- Drop cloth
- #6 large-head galvanized nails or #8 x 1" sheet metal screws

C. CLEARANCE REQUIREMENTS

Check the roughing-in and room dimensions to provide adequate available space for the bath unit.

Your new acrylic module is too large to fit through a standard door opening. The unit must be placed within the installation area prior to completion of framing. An optional procedure is to omit studs in one wall or to install studs without nailing, to allow moving the unit in place.

When moving the unit, avoid flexing the side walls or top to prevent radius cracking. No additional support under the basin area is required when unit is securely nailed into the recess.

NOTICE: Make sure the unit is within the installation area before final framing is completed. The unit will not fit through a standard door opening.

D. NEW OR REPLACEMENT INSTALLATION REQUIREMENTS

This unit can be installed in new or existing bathrooms.

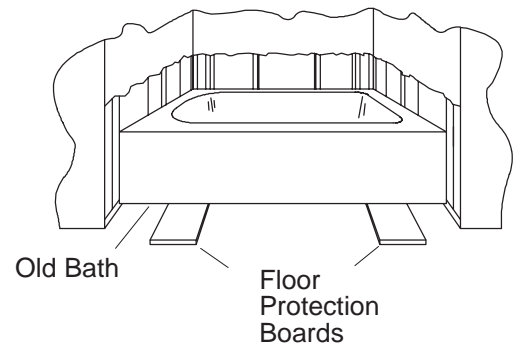
For new installations: Position the plumbing according to the roughing-in on Page 4. Cap the supplies, and check for leaks.

For replacement installations: Remove the old bath. Remove the old wall material, and remove any old floor covering from the area. Remove any old plumbing that does not conform to roughing-in requirements.

5. SITE REQUIREMENTS

A. OLD BATH REMOVAL

Disconnect the drain at the trap. Remove the old wall material. **Slip boards under the old bath feet to protect the floor** and slide the old bath out of the recess as illustrated.



B. SUBFLOOR PREPARATION

Check the flooring under the bath, and make repairs as needed. Make sure the subfloor is level.

C. USER ACCESS CONSIDERATIONS

1. Provide clear floor space according to the roughing-in illustrations. You can provide this clear floor space with either a front or side user access.
2. Consider the path of the wheelchair user when building the clear floor space. Be sure there is sufficient room for a wheelchair user to enter the room and maneuver the wheelchair to the module.
3. Consider the location of the bath and shower controls. ADA compliant control area locations are illustrated on Page 4.
4. If possible, consider the user's physical limitations when determining bath and shower control positioning and entrance into the module. To ensure ADA compliance, position the module exactly as shown in the roughing-in diagram on Page 4.
5. If the user will have care giver assistance, we recommend that you employ a front entrance.

D. PLUMBING ACCESS CONSIDERATIONS

Because this is a one-piece unit, the drain and overflow connections cannot be made by reaching over the end of the bath. Before installation, provide access to all connections. Please consider the following factors.

1. **If the unit is installed on a slab at a corner of the outside walls:** Make connections to the accessible end, or provide access to the plumbing connections.
2. **If the unit is installed on a slab back-to-back against the outside walls:** Plan to use adequate access to the plumbing connections.
3. **In wood partition construction (multiple-unit installations):** At least one unit should have access through which the other unit may be accessed.
4. **In masonry or fire-rated partitions:** Provide access to plumbing connections.
5. **Units installed on slab in a cluster of four, back-to-back, end-to-end (multiple-unit installations):** Should be planned with a plumbing wall which provides sufficient clearance for access through plumbing wall from the accessible end.
6. **When unit is installed where drain connections are accessible from below:** Connections can be easily made from underneath the unit.

E. OTHER INSTALLATION CONSIDERATIONS

1. When fire wall is specified, it should be in place before you install the unit.
2. If unit is to be installed adjacent to a vertical duct or chase, fire-rated gypsum drywall should surround the unit.

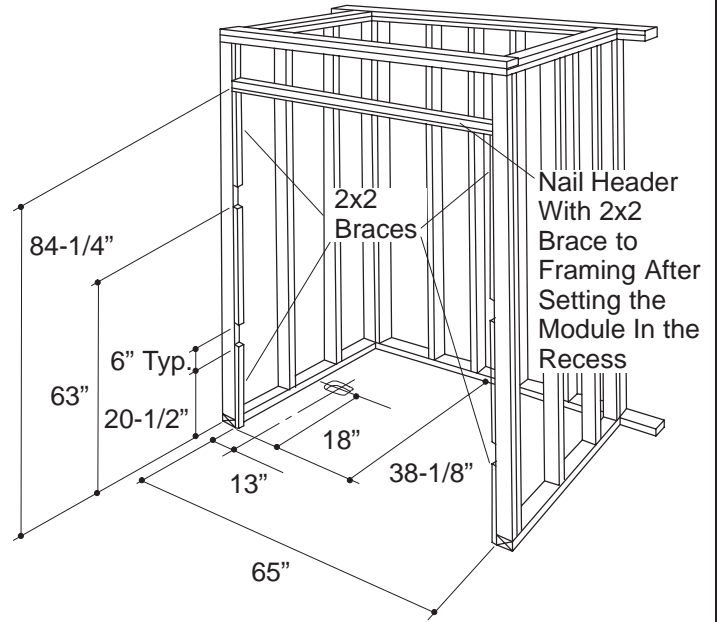
F. STUD POCKET PREPARATION

Construct a minimum 2x4 recess designed for your particular installation. Make sure you allow for access to the pump in the event the unit requires service. When constructing the framing, allow for the thickness of sub and finish wall materials.

The unit should be installed as a recess installation. The variety of installations possible with this unit may require framing other than described in this manual.

1. Construct a recess with a header that is square vertically and horizontally in accordance with roughing-in dimensions for the unit. **Do not nail header with 2x2 brace to stud frame until after the module is positioned in the recess.** Install a 2x2 brace and toe plate around the recess opening.
2. **If extra grab bars are specified:** Provide 2x6 bridging or attachment at specified positions. Refer to the grab bar manufacturer's instructions.

NOTE: A 5" diameter opening in the floor should be provided to permit drain connection clearance.



G. PLUMBING PREPARATION

Position the plumbing according to the roughing-in dimensions. Cap the supplies, and check for leaks.

6. BEFORE INSTALLING UNIT

A. PARTIALLY INSTALL BATH DRAIN

Install the drain on the bath according to the drain manufacturer's instructions. When installing the drain overflow tube and hood, be sure to adequately seal along the edges of the hood to prevent leakage.

B. PROTECT WHIRLPOOL UNIT

Position a drop cloth or similar material in the bottom of the unit. Be careful not to scratch the surface of the product.

7. INSTALL THE WHIRLPOOL

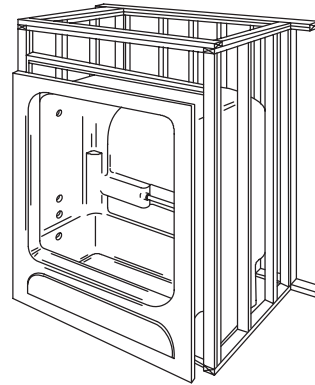
A. WHIRLPOOL SET-IN

1. Lay out and mark the supply or mixing valve hole locations on the back of the unit. Drill a 1/4" diameter pilot hole at each fitting mark.
2. For multiple-unit installations, where the supply fittings have been accurately located during the plumbing rough-in, a template made of lightweight plywood and containing all the correct pilot holes can be used to position the holes on the back surface of the unit.
3. Use a hole saw to drill the holes required. **Drill from the finished face of the unit.**

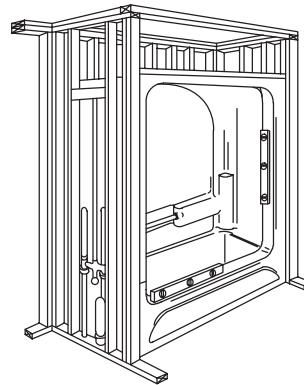


CAUTION: Risk of product damage. When moving the unit, do not flex or damage may occur.

4. Clean the bath recess thoroughly. Carefully slide the unit into the recess.



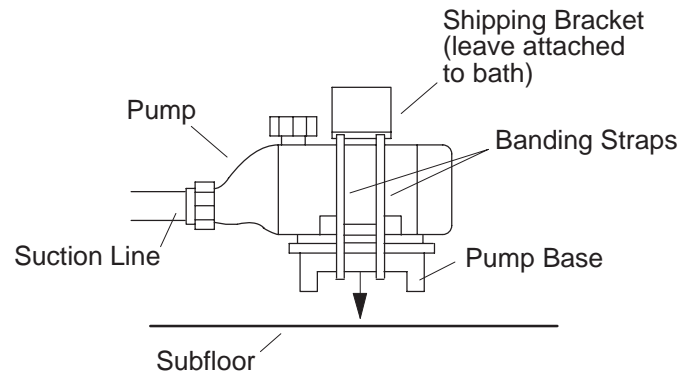
5. Use a level to plumb and level the unit. Be sure the bottom of the unit is firmly supported against the floor. Use shims as needed. Some framing adjustments may be necessary. **No additional support is necessary.**
6. Attach the unit to the 2x2 brace and toe plate previously installed around the recess rough opening.
7. Use #6 large-head galvanized nails or #8 x 1" sheet metal screws across the top and bottom, and up both sides.



B. PUMP BANDING STRAP CUT

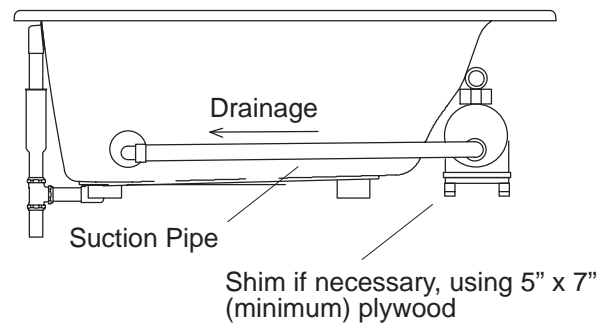
NOTICE: This step is necessary to make your Kohler whirlpool operate more quietly.

1. Use tin snips to cut the two banding straps. These banding straps secure the pump to the whirlpool-mounted shipping bracket. When the banding straps are cut, the pump base and pump will drop about 1/2" until they rest on the subfloor. If the pump drops more than 1/2", be sure the proper pitch is maintained (with shims under the motor) to allow the pump to drain through the suction line when the whirlpool is drained.

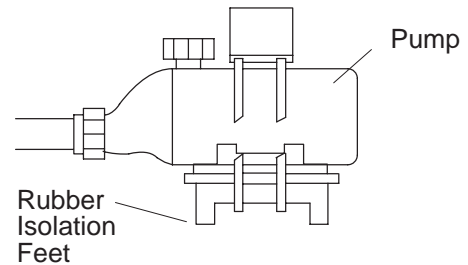


2. If the subfloor is level, no adjustments to the pump are necessary. Proceed to Step 3. If the subfloor is not level, slide plywood shims between the pump base and the subfloor, but only high enough to allow water to drain out the suction line when the bath is drained.

NOTE: Do not raise the pump higher than it was before you cut the banding straps. If the pump is raised too high, it may not prime properly.



3. To minimize bath noise and vibration, be sure the pump is not in direct contact with the shipping bracket after the banding straps are cut. The pump base contains rubber isolation feet to reduce pump noise and vibration.

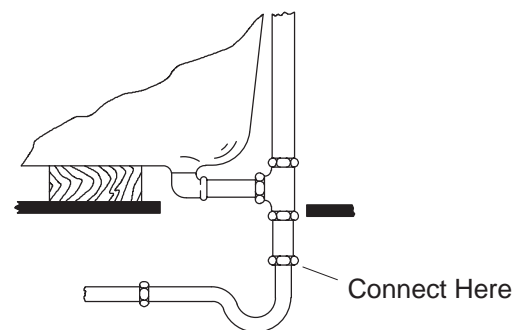


C. INSTALL PLUMBING

CAUTION: Risk of damage to bath bottom and subfloor. Ensure a watertight seal on the bath drain connections.

1. When the bath is securely positioned, connect the drain to the trap.

NOTE: An access panel will simplify future maintenance.



2. Open hot and cold valves and check all supply connections for leaks.

3. Run water into the bath, and check the drain connections for leaks.

8. ELECTRICAL CONNECTIONS

A. IDENTIFY ELECTRICAL REQUIREMENTS

The model number is printed on a label at the pump end of the whirlpool.

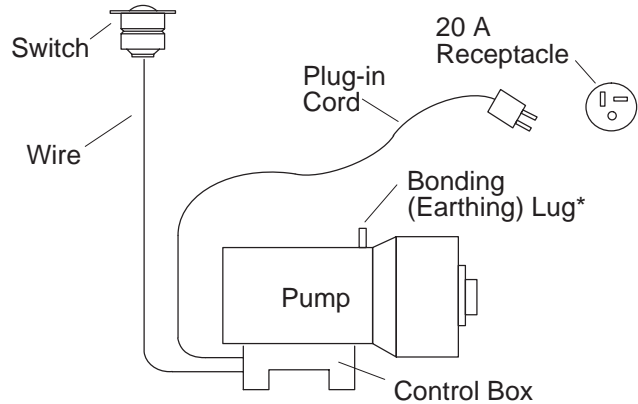
The label identifies electrical rating.

B. WIRING INFORMATION – 120 V, 60 HZ – 2-SPEED PUMP (UL LISTED) MODELS

⚠ WARNING: Risk of electrical shock. To reduce the risk of electric shock, connect only to a properly grounded, grounding-type receptacle, protected by a Ground-Fault Circuit-Interrupter (GFCI). Do not remove the plug's grounding pin. Do not use a grounding adapter.

Your Kohler whirlpool bath is equipped with a cord and plug. All wiring of the pump and control has been completed at the factory. A licensed electrician must install a GFCI-protected, 120 V, 20 A, grounded outlet. Your whirlpool may then be plugged into this outlet. No other load should be on this circuit. Locate the outlet behind the whirlpool, and within 24" of the pump.

* For bonding in accordance with national and local codes.



9. WATER TEST WHIRLPOOL AND ELECTRONICS

Check all electrical connections.

Make sure all pipe connections to the pump are securely tightened.

Fill the whirlpool to a level at least 2" above the top of the highest jet.

Operate the whirlpool for 5 minutes, and check all whirlpool harness (piping) connections for leaks.

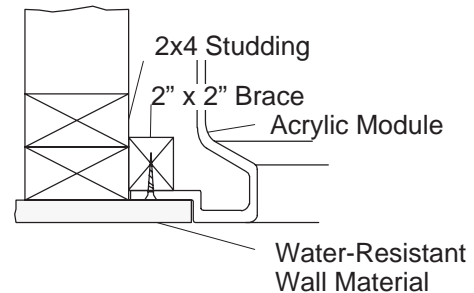
For additional information on whirlpool operation, see Start-Up Whirlpool instructions on Page 14.

10. COMPLETE FINISH WALL

Install water-resistant wall material for either flush or alcove installation as follows:

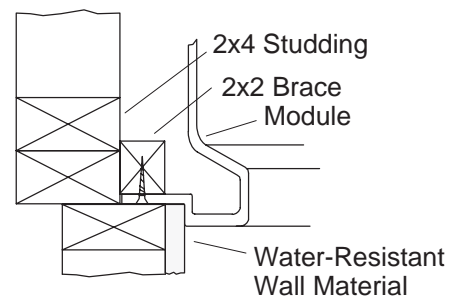
For flush installations: Install water-resistant wall material to within 1/4" of the module edge. Install desired trim around the unit to conceal the module edge. Also install trim along the bottom apron edge.

Tape, mud, and finish the water-resistant wall material.



For alcove installations: Install water-resistant wall material around the unit to conceal the module edge.

Tape, mud, and finish the water-resistant wall material.



11. COMPLETE INSTALLATION

A. INSTALL WHIRLPOOL TRIM KIT

Refer to the installation instructions packed with the trim kit when installing the jet or suction trim.

B. INSTALL FAUCET AND DRAIN TRIM

Install all finished faucet and drain trim according to manufacturer's instructions.

C. INSTALL EXTRA GRAB BARS

Any extra grab bars or towel bars should now be installed through the module walls, and secured in place directly to the bridging previously installed. Screws, bolts, and backing should be selected to properly secure the grab bars. Carefully seal around the grab bar fastener areas. Follow the grab bar manufacturer's instructions.

Grab bars can also be installed directly to the module, providing the proper fastening device is selected to securely attach the bar to the unit. Manufacturer's suggestions concerning grab bar installation must be carefully followed.

D. INSTALL SHOWER ROD

The shower rod, if used, should now be installed. Position the shower rod so the shower curtain hangs inside the bath.

E. SHOWER DOOR INSTALLATION

Shower doors for this unit are available from the Kohler Co. Contact your dealer for more information on shower door availability and installation.

When shower doors are to be installed on this bath module, follow these instructions:

1. Make sure the shower door is the correct size at width, height, header, and threshold.
2. Mark the locations of the fastener holes on the bath module columns.
3. Carefully drill the holes into the bath module columns.
4. To fasten the shower door columns to the bath module columns, install hollow wall anchors that have a 1/8" – 3/8" wall thickness allowance. **Do not overtighten the hollow wall anchors, or damage to the bath module may result.**

12. CLEAN-UP AFTER INSTALLATION

When cleaning up after installation, **do not use abrasive cleansers** as they may scratch and dull the bath surface. Use warm water and a liquid detergent to clean the surface.

Stubborn stains, paint, or tar can be removed with turpentine or paint thinner. **Do not allow cleaners containing petroleum distillates to remain in contact with whirlpool surfaces for long periods of time.** Plaster can be removed by scraping with a wood edge. Do not use metal scrapers, wire brushes, or other metal tools. A powder-type detergent may be used on a damp cloth to provide mild abrasive action to the residual plaster.

13. CONFIRM PROPER OPERATION

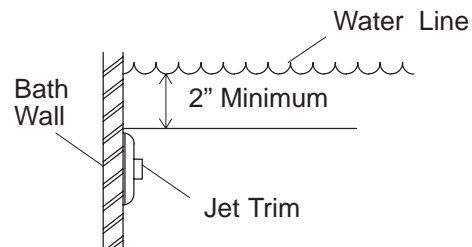
A. START-UP WHIRLPOOL

Refer to Important Safety Instructions on Page 2.

Please perform the following so the owner can safely receive the benefits of whirlpool bathing.

1. Rotate the jets so they are facing down toward the basin.
2. Fill the whirlpool to a water level at least 2" above the top of the highest jet.

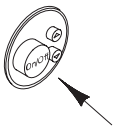
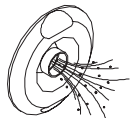
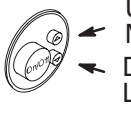
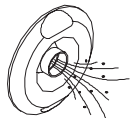
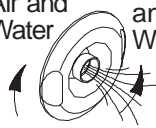
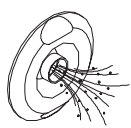
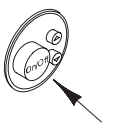

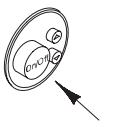
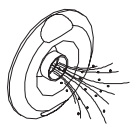
Water temperature in the bath should not exceed 104°F (40°C).



B. OPERATING SEQUENCE

Refer to the chart at right for the proper operating sequence.

1. Turn on the whirlpool jets. Adjust each jet for optimum air/water mixture.
2. A built-in timer automatically stops the motor after approximately 20 minutes of operation.
3. A built-in heater automatically maintains the water temperature while whirlpool bathing.

TO	METHOD	OBSERVE
Turn on whirlpool massage and the heater.		
Decrease flow by pressing ↓ key; increase flow by pressing ↑ key.	 Up/ More Down/ Less	
To add air and water to whirlpool action, rotate the trim ring counterclockwise. To reduce air and water, rotate it clockwise.	 Reduce Air and Water Add Air and Water	
Shut off whirlpool.		
Restart whirlpool after 20 minute cycle is complete.		

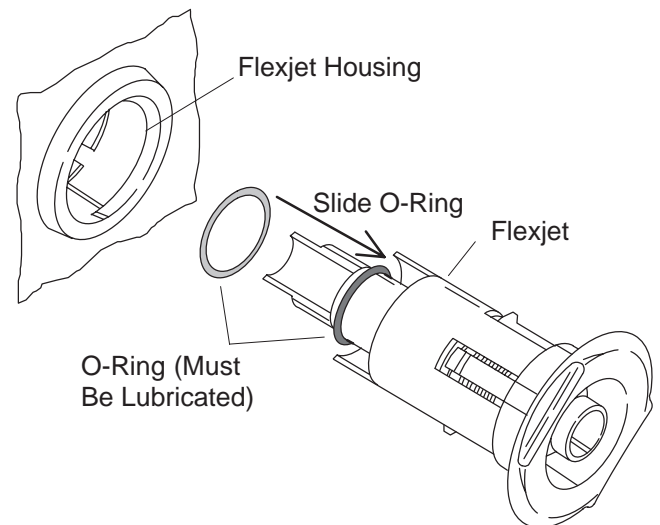
14. TROUBLESHOOTING PROCEDURES

A. FLEXJET INSTALLATION

NOTE: The Flexjet O-ring must be correctly positioned, must be lubricated, and must be in good condition to permit easy rotation and proper operation.

1. Install the O-ring onto the **first shoulder** of the Flexjet. Lubricate the O-ring with silicone lubricant to prevent noisy operation of the Flexjet.
2. Insert the Flexjet into the housing, and lightly push and rotate the Flexjet until it snaps into position. **Do not force the Flexjet.**

NOTE: When installed correctly, the Flexjet should turn smoothly both clockwise and counterclockwise.



B. TROUBLESHOOT WHIRLPOOL SYSTEM

This troubleshooting guide is for general aid only. A Kohler Authorized Service Representative or a qualified electrician should correct all electrical problems. For warranty service, contact your dealer or wholesale distributor.

SYMPTOMS	PROBABLE CAUSES	RECOMMENDED ACTION
1. Whirlpool does not start/stop.	A. No power to pump/control.	A. Set/Reset GFCI; check wiring to pump/receptacle.
	B. Jets are blocked.	B. Remove blockage.
	C. Switch disconnected from pump/control box.	C. Reconnect switch to pump/control box.
	D. Switch faulty.	D. Replace switch.
	E. Faulty circuit board.	E. Replace circuit board inside pump/control box.
	F. Faulty motor/pump assembly.	F. Replace motor and pump.
2. Motor starts, all jets are not functioning.	A. Jet is closed.	A. Rotate jets counterclockwise to open.
	B. Trim kit installed incorrectly.	B. Reinstall trim kit, checking for damage to O-ring.
3. Whirlpool stops automatically before 18 minutes.	A. GFCI trips.	A. Identify source of fault and correct.
	B. Suction blocked.	B. Remove obstruction.
	C. Jets are blocked.	C. Remove blockage.
	D. Motor overheated and protection device activated.	D. Check for blockage at motor vents. Remove blockage and allow motor to cool. Check for suction blockage. Remove blockage and allow motor to cool. Check for jet blockage. Remove blockage and allow motor to cool.
	E. Faulty circuit board.	E. Replace circuit board inside pump/control box.
4. Whirlpool does not automatically stop after 22 minutes.	A. Faulty circuit board.	A. Replace circuit board inside pump/control box.
5. Pump does not prime.	A. Pump shimmed too high.	A. Lower pump/control to subfloor level that bath is resting upon.
6. Noisy operation.	A. Pump straps have not been cut.	A. Cut straps with tin snips.
	B. Jet squeals due to dislodged jet O-ring.	B. Remove jet, replace and lubricate O-ring on valve body, and reinstall jet.